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(54) Title: GENERATIONS OF SEQUENCES OF WAVEFORMS

(57) Abstract: A sequence of waveforms is generated by producing a primary symbol sequence and, for each symbol within the sequence, substituting a randomly-selected waveform. The primary symbol sequence has a narrow autocorrelation function, and may be a train of pulses, with the pulses arranged in packets of predetermined configuration. Objects can be detected by transmitting the waveforms, forming a representation of the transmitted waveform and delaying that representation, and correlating the representation with signals received as a result of reflection of the transmitted waveforms.

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